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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,438	01/23/2004	Andrew M. Hatch	HSTI 0135 PUS1/H50006AHST	6831
35312	7590	06/22/2010	EXAMINER	
BROOKS KUSHMAN P.C./ HENKEL CORPORATION 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238			DOUYON, LORNA M	
		ART UNIT	PAPER NUMBER	
		1796		
		MAIL DATE	DELIVERY MODE	
		06/22/2010	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/763,438	HATCH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lorna M. Douyon	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 22 April 2010.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4,6-10,14,16,17,80,81,84-86,88,89,92-94 and 98-103 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 99 is/are allowed.

6) Claim(s) 1-4,6-10,14,16,17,80,81,84-86,88,89,92-94, 98 and 100-103 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 22, 2010 has been entered.

2. Claims 1-4, 6-10, 14, 16-17, 80-81, 84-86, 88-89, 92-94, 98-103 are pending. Claims 5, 11-13, 15, 18-79, 82-83, 87, 90-91, 95-97 are cancelled. Claims 4, 81 and 99 are currently amended. Claims 100-103 are newly added.

3. The rejection of claims 96-97 under 35 U.S.C. 112, first paragraph is rendered moot in view of Applicants' cancellation of these claims.

4. The rejection of claim 99 under 35 U.S.C. 103(a) as being unpatentable over Li et al. (US Patent No. 6,214,777) is withdrawn in view of Applicants' amendment.

5. The rejection of claim 99 under 35 U.S.C. 103(a) as being unpatentable over Yianakopoulos (US Patent No. 5,462,697) is withdrawn in view of Applicants' amendment.

6. The rejection of claim 99 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoshowski et al. (US Patent No. 4,960,588) is withdrawn in view of Applicants' amendment.

7. The rejection of claim 99 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Neidiffer et al. (US Patent No. 4,959,105) is withdrawn in view of Applicants' amendment.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 89 and 100 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "R<sub>1</sub> has...35 carbon atoms" in line 2 of claim 89 and line 6 of claim 100 are not supported in the specification and are considered as new matter. The added limitation in these claims lacks literal basis in the specification as originally filed, see *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984).

10. Claims 4, 14 and 103 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, line 3, the minimum ethoxylate which is "10" is outside the range of "20 to 80" of claim 1, to which this claim is dependent upon.

Claim 14 is dependent from a cancelled claim. In addition, it is suggested that "nonionic" be added before "surfactant" in line 2 to be consistent with the language of claim 1.

In claim 103, line 2, "10-15 ethoxylate" is outside the range of "20 to 80" of claim 1, to which this claim is dependent upon.

#### ***Claim Rejections - 35 USC § 103***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 1-4, 6-10, 14, 16-17, 80-81, 84-86, 88-89, 92-94, 98, 100 and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (US Patent No. 6,214,777), hereinafter "Li".

Li teaches a lubricant composition which is used to treat or lubricate containers (see col. 1, lines 8-10), like aluminum cans (see col. 8, line 66), which comprises neutralizing agents, surfactants, water and water-conditioning agents (see col. 6, lines

41-43). Useful neutralizing agents include the alkali metal hydroxides and are present in an amount to adjust the pH of the composition to a range of about 3 to about 9.5 (see col. 6, lines 44-57). Suitable surfactants include nonionic surfactants (see col. 6, lines 59-67). Particularly suitable nonionic surfactants are the alkoxylated alcohols having the general formula  $R^{10}O((CH_2)_mO)_n$  wherein  $R^{10}$  is an aliphatic group having from about 8 to about 24 carbon atoms, m is a whole number from 1 to about 5, and n is a number from 1 to about 40 which represents the average number of ethylene oxide groups on the molecule (see col. 7, lines 18-25), and can be used in an amount of about 0.5 to about 30 percent by weight of the composition (see col. 7, lines 26-30). Other surfactants include ethoxylated alkylphenols and polyoxyalkylene oxide block copolymers (see col. 7, lines 1-17). Generally, the total surfactant concentration ranges from about 1 wt% to 50 wt%, and one or more surfactants can be used (see col. 7, lines 50-53). Li, however, fails to specifically disclose a cleaning composition having an average water-break-free percent reduction of less than 50% after 7 days aging as required in claim 1; a composition comprising an ethoxylate of an alcohol having a formula wherein the linear alcohol ethoxylate has an alkyl group and ethoxy group as those recited, and another nonionic surfactant in amounts as those recited, the water-break-free percent reduction; and cloud point and pH of the composition as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Li to have a similar water-

break-free percent reduction as those recited because similar ingredients have been utilized.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a composition comprising a combination of nonionic surfactants in their optimum proportions wherein one contains a 40 mole ethoxy group, and another with a lower ethoxy group because it is taught by Li at col. 7, lines 52-53 that one or more surfactants may be used, and to optimize the ethylene oxide and alkyl groups of the nonionic surfactants because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the water-break-free percent reduction and cloud point of the composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect said properties to be within those recited because similar ingredients have been utilized. "Products of identical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the

properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (fed. Cir. 1990). See MPEP 2112.01 II.

With respect to the pH of the composition, as the word “about” permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower pH limit of about 3 may be considered to read on pH less than 2. In the alternative, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775,227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

13. Claims 1-4, 7-10, 14, 16-17, 80-81, 84-85, 88-89, 92-94, 98, 100-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yianakopoulos (US Patent No. 5,462,697).

Yianakopoulos teaches a cleaning composition for cleaning hard surfaces in the form of a dilute oil-in-water microemulsion which comprises about 0.1 to about 15% of a water-mixable nonionic surfactant, 1% to 10% of at least one organic acid cosurfactant, and 10% to 85% of water, said proportions being based upon the total weight of the composition (see col. 4, lines 3-23; 40-52; col. 8, lines 27-29). The nonionic surfactant includes the condensation products of a higher alcohol (e.g., an alkanol containing about 8 to 18 carbon atoms in a straight or branched chain configuration) condensed with about 5 to 30 moles of ethylene oxide (see col. 8, lines 47-51). Yianakopoulos also teaches that the acidic all purpose hard surface cleaning composition comprises

approximately 0.1% to 30 wt% of at least one surfactant selected from the group consisting of nonionic surfactants and anionic surfactants (see col. 4, lines 43-45, col. 15, lines 64-67). Examples of different nonionic surfactants are disclosed in col. 8, line 27 to col. 9, line 67, and one example is ethylene oxide-propylene oxide condensates of primary alcohols. The pH of the microemulsion cleaner is usually 1-5, preferably 1-4, and more preferably 1.5-3.5 (see col. 14, lines 60-62). Yianakopoulos, however, fails to specifically disclose (1) a cleaning composition comprising a nonionic wherein the ethoxylate of an alcohol has 12 to 80 carbon atoms and 20 to 80 mole ethoxylate or 12 to 35 carbon atoms and 20-41 mole ethoxylate, and another nonionic surfactant different from the first, as required in the independent claims; (2) a cleaning composition having an average water-break-free percent reduction of less than 50% after 7 days aging; (3) a cleaning composition which is capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition as required in claim 3; (4) the cloud point of the cleaning composition as required in claims 2 and 81; (5) the ethoxylate of an alcohol having 20 carbon atoms as required in claim 10; and (6) the ethoxylate of an alcohol having a mixture of straight and branched alkyl as required in claim 7.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared an acidic cleaning composition comprising one nonionic surfactant wherein the ethoxylate group and alkyl group are within those recited, and another nonionic surfactant different from the first

because Yianakopoulos teaches "at least one nonionic surfactants" and to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Yianakopoulos to exhibit a water-break-free percent reduction of less than 50% because similar components having overlapping proportions have been utilized.

With respect to difference (3), it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. The recitation of a new intended use for an old product does not make a claim to that old product patentable, see *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

With respect to difference (4), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect said property to be within those recited because similar ingredients have been utilized. "Products of identical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (fed. Cir. 1990). See MPEP 2112.01 II.

With respect to difference (5), a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775,227 USPQ 773 (Fed. Cir. 985). See MPEP 2144.051.

With respect to difference (6), the combination of the straight and branched chains in the nonionic surfactant of Yianakopoulos (see col. 8, lines 47-51) is likely to be obvious when it does no more than yield predictable results.

### ***Allowable Subject Matter***

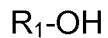
14. Claim 99 is allowed. The following is a statement of reasons for the indication of allowable subject matter: Binns (Re 31,198), the closest prior art, teaches an aqueous solution for cleaning aluminum which comprises an active fluoride compound, sulfuric acid and surfactant (see abstract), which can be anionic, cationic or nonionic (see col. 6,

lines 24-25). Binns, however, fails to disclose, teach or suggest a cleaning composition which "consists of" the recited components.

15. In the event Applicant amend independent claim 1, which follows, the claim would be allowable over the prior art of record in view of the showing on pages 27-28 of the specification.

--Claim 1: A cleaning composition for formed metal articles, the cleaning composition comprising water and:

A) an ethoxylate of an alcohol present in an amount from about 0.1 to 3 g/l, the alcohol having Formula I:



wherein  $R_1$  is a saturated or unsaturated, straight-chain or branched alkyl having from 12 to [80] 25 carbon atoms and the ethoxylate is a 20 to [80] 41 mole ethoxylate;

B) an inorganic pH adjusting component present in an amount such that the pH of the cleaning composition is less than 2; and

C) at least one nonionic surfactant that is different than component A present in an amount from about 0.1 to about 3 g/l, wherein the cleaning composition has [an average] a water-break-free percent [reduction of less than 50% after 7 days aging] from 84% to 100%.--

***Response to Arguments***

16. Applicants' arguments filed April 22, 2010 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Li, Applicants argue that Li discloses a lubricant composition, which contrary to a cleaning composition, is to remain on the metal material to provide a lubricating effect.

The Examiner respectfully disagrees with the above argument because even though Li does not teach the use of the composition for cleaning formed metal articles, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

Applicants also argue that Li discloses a composition having a pH of 3 to about 9.5, while the pH of the cleaning composition in claim 1 is less than 2. Applicants also argue that while the term "about" does provide some tolerance, it is unreasonable to assume that such tolerance would allow reading a pH less than 2, which is 10 times more acidic than the pH of 3 of Li.

The Examiner respectfully disagrees with the above argument because in col. 6, lines 44-57, Li teaches that the composition has a pH in the range of about 3 to about 9.5. The Examiner maintains that the word "about" permits some tolerance. (At least about 10% was held to be anticipated by a teaching of a content not to exceed about 8%, see *In re Ayers*, 154 F 2d 182,69 USPQ 109 (CCPA 1946). A pressure limitation of 2-15 pounds per square inch was held to be readable on a reference which taught a

pressure of the order of about 15 pounds per square inch, see *In re Erickson*, 343 F 2d 778, 145 USPQ 207 (CCPA 1965). Hence, “less than 2” pH of the present claims reads on the “about 3” pH of Li. In alternative, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775,227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

Applicants also argue that Li’s statement of “one or more surfactants may be used” in no way shape or form makes it obvious to provide a combination of nonionic surfactants in their optimum proportions wherein one contains a 40 mole ethoxy group and the other with a lower ethoxy group. Applicants also argue that the listing of multiple surfactants that can be used in a lubricant does not give rise to optimization of results effective variables.

The Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a composition comprising a combination of nonionic surfactants in their optimum proportions wherein one contains a 40 mole ethoxy group, and another with a lower ethoxy group because it is taught by Li at col. 7, lines 52-53 that one or more surfactants may be used, and to optimize the ethylene oxide and alkyl groups of the nonionic surfactants because it has been held to be obvious to select a value in a known range by optimization for the best results. Also, rationale different from applicant is permissible. The reason or motivation to modify the reference may often suggest what the inventor has done, but for a

different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant, *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Dillon*, 91 9 F.2d 688,16 USPQ2d 1897 (Fed. Cir. 1990) *cert. denied*, 500 U.S. 904 (1991). Also, while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention, *Ex parte Levengood*, 28 USPQ2d 1300,1302 (Bd. Pat. App. & Inter. 1993).

With respect to the obviousness rejection based upon Yianakopoulos, Applicants argue that Yianakopoulos does not disclose, teach or suggest a cleaning composition comprising an ethoxylate having 12 to 80 carbon atoms and 20 to 80 mole ethoxylate and another surfactant different from the first.

The Examiner respectfully disagrees with the above arguments because Yianakopoulos teaches that the nonionic surfactant includes the condensation products of a higher alcohol (e.g., an alkanol containing about 8 to 18 carbon atoms in a straight or branched chain configuration) condensed with about 5 to 30 moles of ethylene oxide (see col. 8, lines 47-51 ) and also teaches that the acidic all purpose hard surface cleaning composition comprises approximately 0.1% to 30 wt% of at least one surfactant selected from the group consisting of nonionic surfactants and anionic surfactants (see col. 4, lines 43-45, col. 15, lines 64-67). Hence, with this teaching, more than one nonionic surfactants may be used, and may have ethylene oxide units, say for example, 5 moles in one and 30 moles in the other.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796